

# 2010-11-22 Monday Morning Notes

Monday, November 22, 2010  
7:19 AM

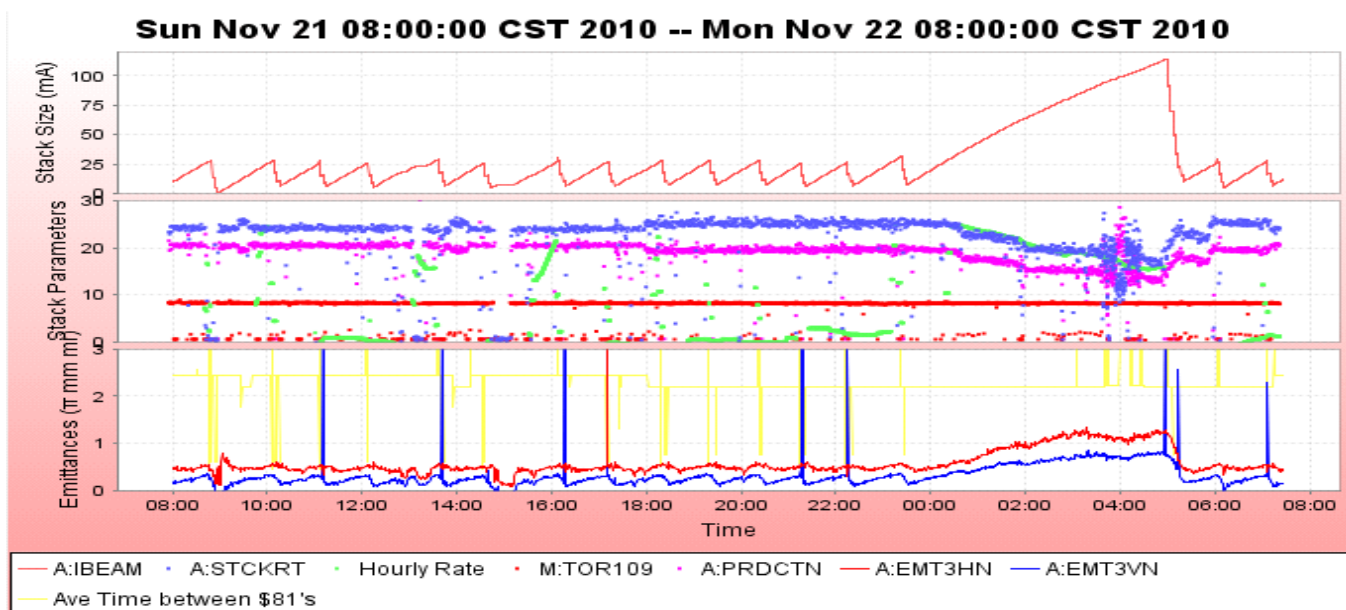
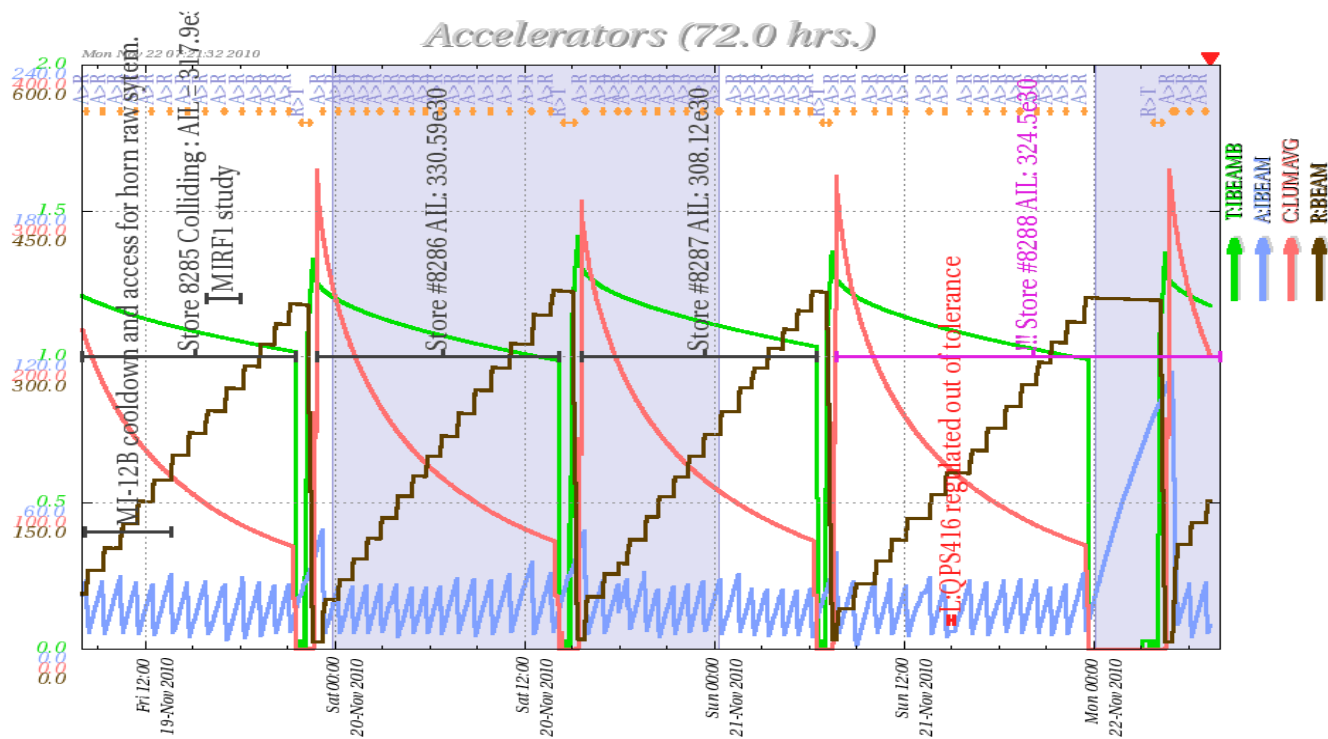
## Stacking and Transfers

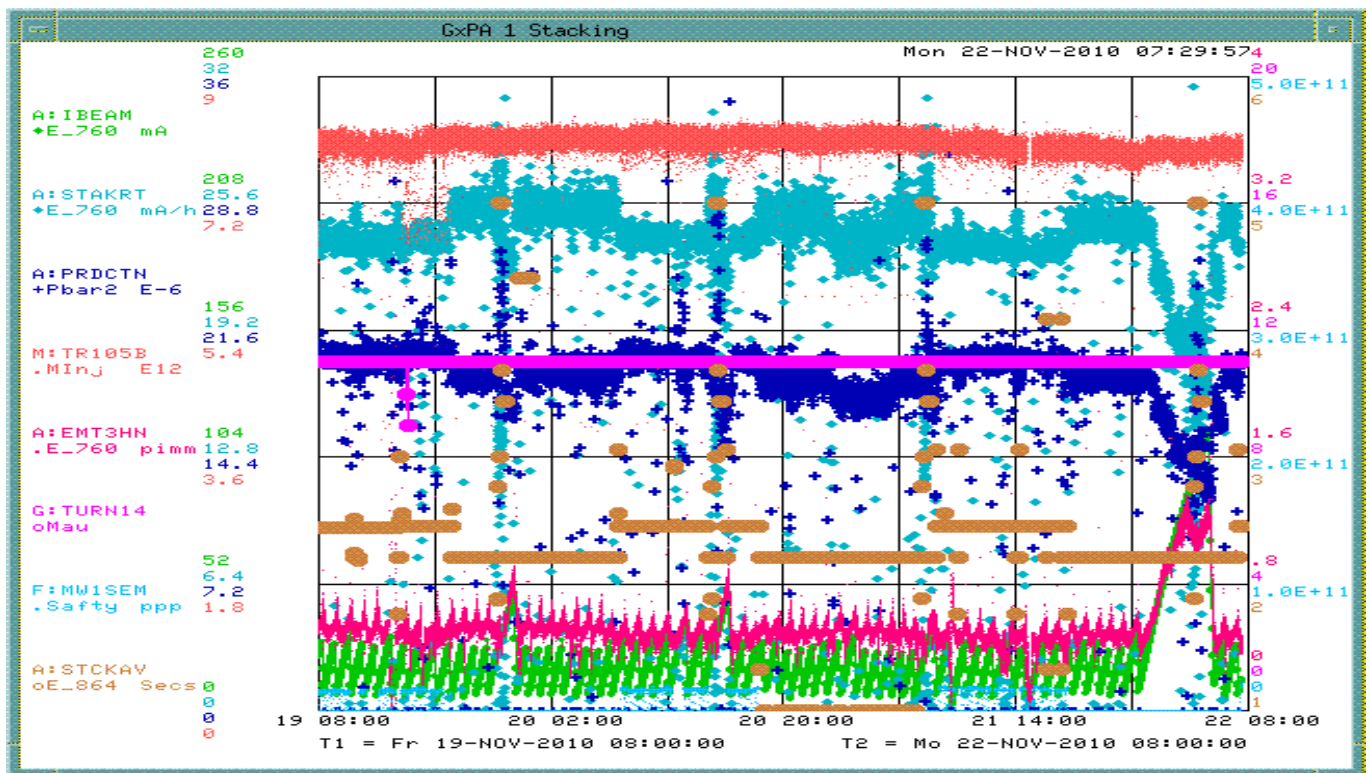
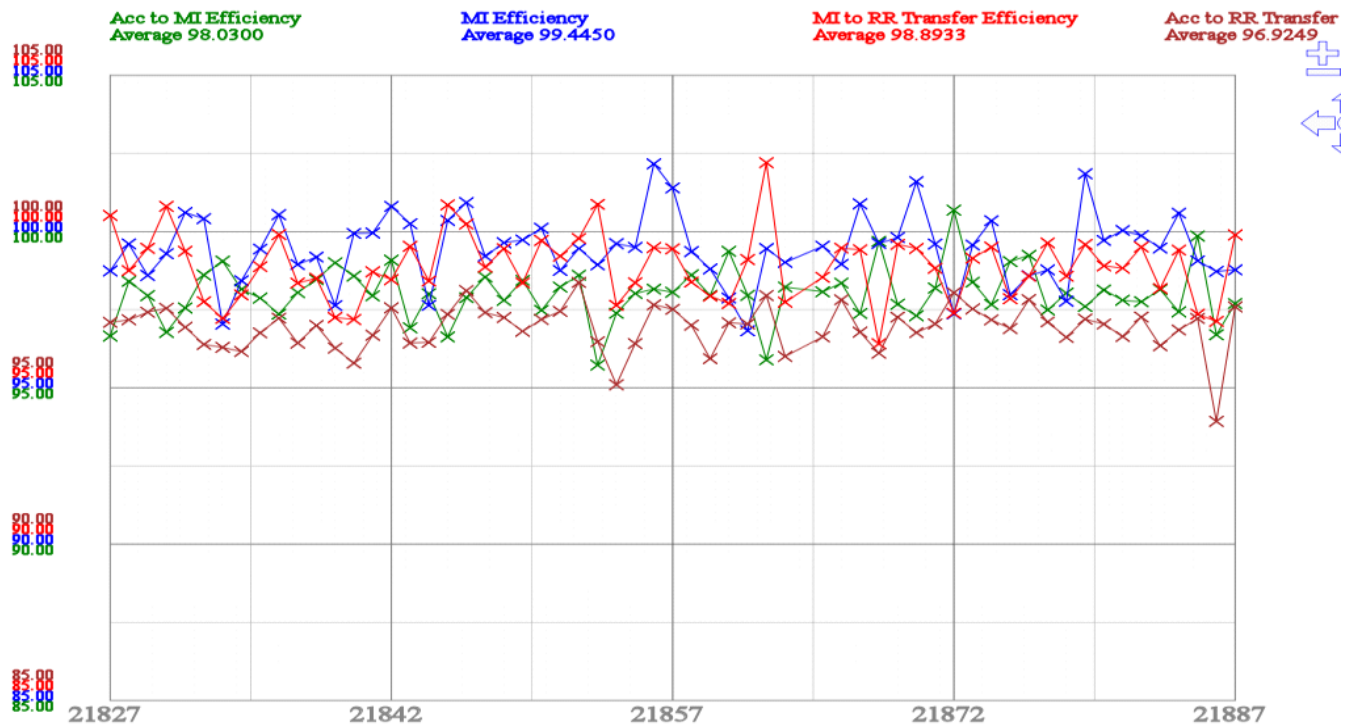
- Stacking numbers
  - 21.7mA/hr (including one big stack)
  - 18.3 pbar/Mp
  - 7.97 Tp
- Unstacking Numbers
  - 1151E10 in 184 transfers over 60 sets with an average efficiency of 96.7%
  - Daily average 517E10 in 61 transfers over 20 sets

## Numbers

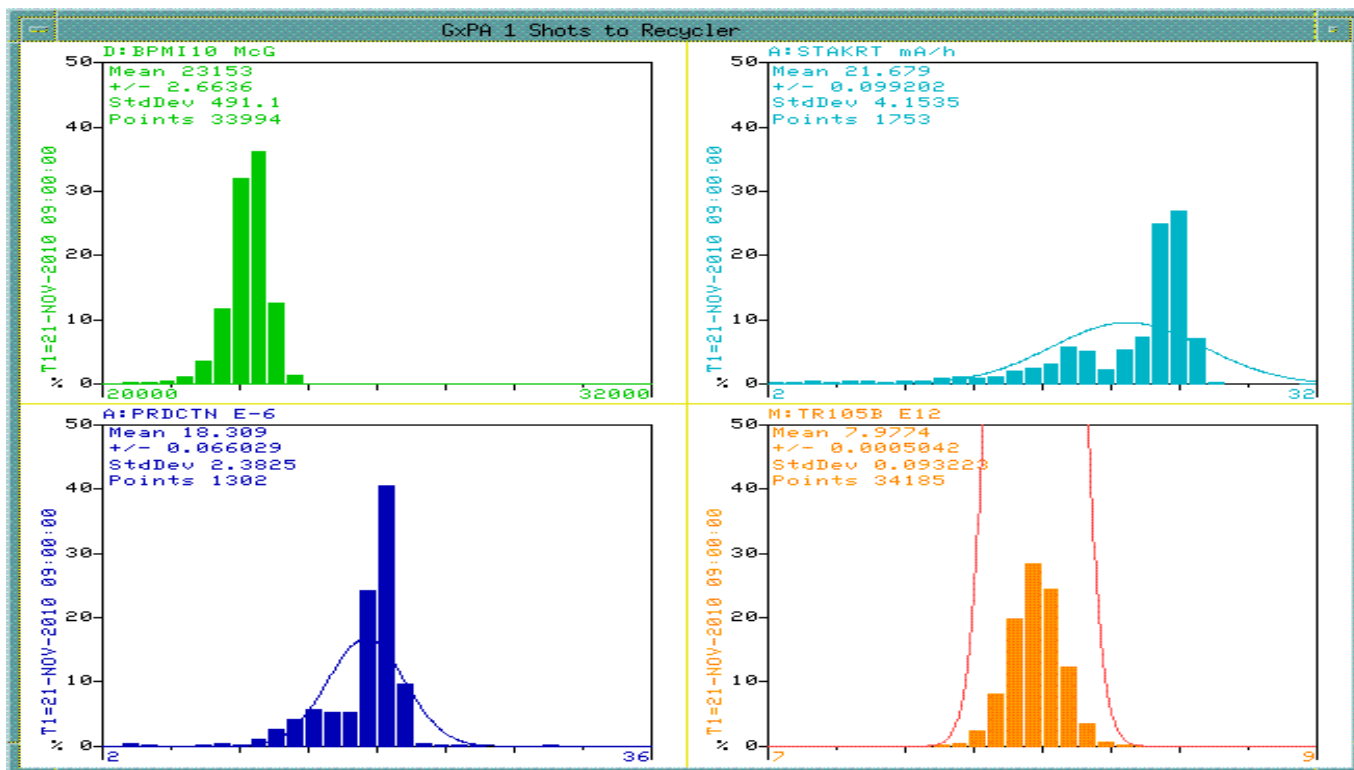
- Stacking
  - Pbars stacked: 1548.60 E10
  - Time stacking: 71.35 Hr
  - Average stacking rate: 21.70 E10/Hr
- Uptime
  - Number of pulses while in stacking mode: 108989
  - Number of pulses with beam: 104676
  - Fraction of up pulses was: 96.04%
- The uptime's effect on the stacking numbers
  - Corrected time stacking: 68.53 Hr
  - Possible average stacking rate: 22.60 E10/Hr
  - Could have stacked: 1612.41 E10/Hr
- Recycler Transfers
  - Pbars sent to the Recycler: 1538.87 E10
  - Number of transfers : 185
  - Number of transfer sets: 62
  - Average Number of transfer per set: 2.98
  - Time taken to shoot including reverse proton tuneup: 00.65 Hr
  - Transfer efficiency: 96.37%
- Other Info
  - Average POT : 8.06 E12
  - Average production: 18.36 pbars/E6 protons

## Plots





We now have more than 4 colors on D44!!!!



Column 1 Number _0_Pbar Transfer Shot #	Column 4 Number_3_ Transfer Time	Column 21 Number _20_A-I BEAMB sampled on \$91 (A:BEA M7), E10	Column 22 Number _21_A-I BEAMB sampled on \$94 (A:BEA M9), E10	Unstacked (mA)	Column 23 Number _22_R: BEAMS (R:BEA ME0[0]), pre xfer E10	Column 24 Number _23_R: BEAM (R:BEA ME0[1]), post xfer, E10	Stashed	Acc to RR Eff	Acc to MI Eff	Acc to MI2 Eff	Acc to MI Efficiency	Transfers	Sets	Column 5 Number _4_Acc Horizontal Emittance	Column 6 Number _5_Acc Vertical Emittance	Column 8 Number _7_Acc Longitudinal Emittance	
	Totals =>			1551.41			1499.40	96.65%	98.00%	97.45%	95.50%	184	60	4.8698	2.8882	1.9743	
	Daily Average =>			517.14			499.80					61	20				
21887	Monday, November 22, 2010	6:04	26.80	5.03	23.60	107.37	130.27	23.04	97.60%	97.75%	96.65%	94.47%	3	1	4.504	2.319	1.96
21886	Monday, November 22, 2010	4:59	114.20	10.26	110.32	7.51	108.01	102.47	92.89%	96.48%	95.37%	92.01%	7	1	8.201	4.731	1.817
21885	Sunday, November 21, 2010	23:23	31.74	7.71	26.32	335.77	361.12	25.55	97.09%	99.68%	98.58%	98.26%	3	1	5.004	2.576	1.997
21884	Sunday, November 21, 2010	22:14	26.52	6.28	22.66	314.80	336.59	22.00	97.09%	97.56%	98.05%	95.65%	3	1	4.799	2.063	1.993
21883	Sunday, November 21, 2010	21:15	25.33	5.75	21.83	294.43	315.32	21.04	96.39%	97.85%	97.43%	95.34%	3	1	4.441	2.189	1.987
21882	Sunday, November 21, 2010	20:23	28.59	7.00	24.06	271.78	294.90	23.35	97.07%	97.90%	97.60%	95.55%	3	1	4.885	2.405	2.014
21881	Sunday, November 21, 2010	19:21	28.62	6.85	24.18	249.00	272.17	23.38	96.69%	98.25%	97.66%	95.95%	3	1	4.957	2.471	2.006
21880	Sunday, November 21, 2010	18:20	28.13	6.84	23.77	226.61	249.47	23.11	97.24%	97.86%	97.78%	95.69%	3	1	4.786	2.597	2.01
21879	Sunday, November 21, 2010	17:12	27.52	6.07	23.87	203.94	227.01	23.27	97.48%	97.75%	99.22%	96.99%	3	1	4.638	2.153	1.981
21878	Sunday, November 21, 2010	16:10	28.28	6.20	24.48	180.78	204.25	23.64	96.58%	98.45%	96.03%	94.54%	3	1	4.812	2.273	1.974
21877	Sunday, November 21, 2010	14:35	26.37	5.04	23.41	158.59	181.18	22.76	97.23%	97.54%	97.00%	94.62%	3	1	4.471	1.978	1.958
21876	Sunday, November 21, 2010	13:37	29.30	6.35	25.18	134.32	158.79	24.61	97.72%	99.05%	97.38%	96.46%	3	1	4.615	2.272	1.964
21875	Sunday, November 21, 2010	12:07	26.34	5.40	23.23	112.24	134.61	22.57	97.14%	98.76%	96.58%	95.38%	3	1	4.613	2.104	1.989
21874	Sunday, November 21, 2010	11:07	26.24	5.91	22.75	90.46	112.49	22.13	97.27%	97.91%	97.94%	95.89%	3	1	4.645	2.244	1.963
21873	Sunday, November 21, 2010	10:08	28.48	6.52	24.76	66.68	90.68	24.13	97.43%	98.62%	98.47%	97.11%	3	1	4.809	2.387	1.982
21872	Sunday, November 21, 2010	8:49	27.78	1.47	26.31	41.23	66.84	25.77	97.92%	100.16%	98.25%	98.40%	3	1	2.992	0.411	1.884
21871	Sunday, November 21, 2010	7:45	37.13	6.54	32.57	10.08	41.35	31.56	96.89%	98.18%	98.04%	96.25%	3	1	5.019	2.542	1.903
21870	Sunday, November 21, 2010	6:04	24.76	5.31	21.38	347.36	367.81	20.66	96.63%	97.40%	98.52%	95.96%	3	1	4.479	1.764	1.989
21869	Sunday, November 21, 2010	5:11	24.10	5.89	20.53	328.25	347.97	19.99	97.37%	97.95%	97.60%	95.61%	3	1	4.63	2.046	2.022
21868	Sunday, November 21, 2010	4:17	24.70	5.85	21.12	308.64	328.84	20.29	96.11%	99.64%	99.09%	98.73%	3	1	5.001	2.138	1.997
21867	Sunday, November 21, 2010	3:20	24.86	5.44	21.57	288.36	309.15	20.91	96.95%	97.98%	97.92%	95.94%	3	1	4.776	2.108	2.002
21866	Sunday, November 21, 2010	2:23	24.86	5.73	21.29	268.38	288.89	20.84	97.86%	98.32%	97.77%	96.13%	3	1	4.898	2.467	1.99
21865	Sunday, November 21, 2010	1:31	30.93	7.10	26.02	243.89	268.70	25.04	96.21%	98.21%	97.35%	95.61%	3	1	5.363	2.734	2.002
21863	Saturday, November 20, 2010	23:17	28.15	7.08	23.39	198.26	220.69	22.49	96.17%	98.29%	97.52%	95.85%	3	1	4.709	2.778	1.991
21862	Saturday, November 20, 2010	22:19	26.67	6.69	22.27	177.15	198.66	21.71	97.48%	96.47%	96.75%	93.34%	3	1	4.955	2.665	1.997
21861	Saturday, November 20, 2010	21:23	25.47	6.39	21.39	156.70	177.40	20.73	96.90%	98.03%	95.24%	93.37%	3	1	4.868	2.399	2.011
21860	Saturday, November 20, 2010	20:24	24.45	4.79	21.67	135.82	156.90	21.14	97.56%	99.96%	97.89%	97.85%	3	1	4.697	2.016	1.973
21859	Saturday, November 20, 2010	19:35	29.88	7.61	24.60	112.36	136.00	23.70	96.35%	98.06%	97.31%	95.42%	3	1	4.883	2.639	1.999
21858	Saturday, November 20, 2010	18:28	28.88	8.54	25.37	87.96	112.47	24.64	97.10%	98.34%	98.07%	96.44%	3	1	4.777	2.565	2.002
21857	Saturday, November 20, 2010	17:54	26.57	15.28	11.29	77.17	88.18	11.01	97.52%	98.06%	99.42%	97.50%	1	1	5.207	2.794	1.939
21856	Saturday, November 20, 2010	16:56	28.43	6.41	24.44	53.66	77.33	23.81	97.42%	98.10%	99.69%	97.80%	3	1	4.723	2.486	1.97
21855	Saturday, November 20, 2010	15:47	48.90	6.30	46.03	10.16	53.88	44.12	95.85%	97.76%	97.31%	95.12%	4	1	5.93	3.172	1.906
21854	Saturday, November 20, 2010	13:40	31.76	7.08	27.09	342.83	368.66	25.87	95.50%	97.53%	97.30%	94.90%	3	1	4.989	2.833	1.985
21853	Saturday, November 20, 2010	12:28	35.93	6.27	31.96	313.14	343.69	30.85	96.53%	96.63%	95.87%	92.64%	3	1	5.145	2.664	1.921
21852	Saturday, November 20, 2010	11:02	30.87	6.96	26.30	288.64	314.18	25.85	98.27%	98.51%	98.09%	96.63%	3	1	5.124	3.044	1.964
21851	Saturday, November 20, 2010	9:51	28.43	6.10	24.60	265.70	289.41	23.97	97.45%	98.18%	97.60%	95.83%	3	1	4.881	2.614	1.994
21850	Saturday, November 20, 2010	8:46	28.50	5.43	25.05	242.09	266.26	24.36	97.25%	97.75%	97.88%	95.67%	3	1	4.406	2.495	1.97
21849	Saturday, November 20, 2010	7:43	29.25	6.96	24.80	218.72	242.59	23.96	96.62%	98.23%	97.93%	96.19%	3	1	4.635	3.118	1.98
21848	Saturday, November 20, 2010	6:39	26.11	6.67	21.92	197.90	219.07	21.33	97.32%	97.99%	97.88%	95.91%	3	1	4.854	2.727	2.008
21847	Saturday, November 20, 2010	5:45	25.26	6.31	21.46	177.45	198.19	20.92	97.47%	98.35%	97.63%	96.02%	3	1	5.22	3.137	2.016
21846	Saturday, November 20, 2010	4:51	25.54	6.71	21.36	157.08	177.72	20.96	98.14%	98.22%	98.99%	97.23%	3	1	4.933	3.328	1.997
21845	Saturday, November 20, 2010	3:53	26.61	5.08	23.33	134.76	157.35	22.71	97.35%	97.73%	97.71%	95.50%	3	1	4.624	2.43	1.976
21844	Saturday, November 20, 2010	2:52	26.45	6.85	22.11	113.57	134.89	21.41	96.86%	98.28%	96.36%	94.70%	3	1	5.199	3.076	1.996
21843	Saturday, November 20, 2010	1:58	26.48	6.61	22.16	92.37	113.67	21.43	96.72%	97.35%	97.62%	95.03%	3	1	5.171	2.183	1.985
21842	Saturday, November 20, 2010	1:05	25.51	6.59	21.44	71.70	92.45	20.99	97.88%	99.05%	99.43%	98.49%	3	1	5.294	2.988	2.012
21841	Saturday, November 20, 2010	0:11	26.10	6.68	21.91	50.76	71.82	21.19	96.70%	98.13%	98.03%	96.20%	3	1	5.126	2.063	2.005
21840	Friday, November 19, 2010	23:12	49.03	7.04	45.58	7.73	50.89	43.42	95.25%	98.07%	97.87%	95.98%	4	1	6.496	2.401	1.933
21839	Friday, November 19, 2010	21:03	26.61	6.89	22.20	333.73	354.84	21.39	96.34%	98.98%	97.18%	96.19%	3	1	5.082	1.649	1.988
21838	Friday, November 19, 2010	20:09	26.44	6.50	22.31	312.84	334.36	21.63	96.98%	98.43%	97.91%	96.37%	3	1	4.941	3.01	2.001
21837	Friday, November 19, 2010	19:11	27.42	5.23	23.91	290.49	313.35	23.02	96.29%	98.06%	97.29%	95.40%	3	1	4.661	1.997	1.945
21836	Friday, November 19, 2010	18:10	27.26	4.67	24.26	267.45	290.93	23.60	97.31%	98.01%	97.89%	95.94%	3	1	4.403	2.298	1.934
21835	Friday, November 19, 2010	17:02	27.04	3.91	24.80	244.38	268.17	23.94	96.52%	97.64%	97.33%	95.04%	3	1	4.427	2.748	1.91
21834	Friday, November 19, 2010	15:49	27.79	6.18	24.01	221.84	244.89	23.14	96.36%	97.98%	96.64%	94.68%	3	1	4.986	3.238	1.988
21833	Friday, November 19, 2010	14:40	27.52	5.30	24.22	198.95	222.22	23.41	96.65%	98.85%	97.01%	95.89%	3	1</			